



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,298	09/15/2000	Prabir Bhattacharya	9432-000119	2228

7590 02/23/2004  
Harness Dickey & Pierce PLC  
P O Box 828  
Bloomfield Hills, MI 48303

EXAMINER

ABEL JALIL, NEVEEN

ART UNIT	PAPER NUMBER
----------	--------------

2175

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/662,298

Applicant(s)

BHATTACHARYA, PRABIR

Examiner

Neveen Abel-Jalil

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The amendment filed on December 10, 2003 has been received and entered. Claim 14 is cancelled. Claim 24 is now added. Therefore, claims 1-13, and 15-24 are now pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13, 15, 17-19, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (U.S. Pub. No. 2003/0028811 A1) in view of Schumann et al. (U.S. Pub. No. 2002/0021805 A1).

As to claim 13, Walker et al. discloses a method of operating a computer system (See page 3, paragraph 0019), comprising:

scanning the fingerprint of a user to generate user fingerprint data (See page 1, paragraph 0008, also see page 3, paragraph 0019);

using said user fingerprint data to access a database of stored fingerprint data and to compare said user fingerprint data with stored fingerprint data (See page 2, paragraph 0017);

assigning an access authorization datum to said user based on the results of said comparing step (See page 3, paragraph 0021, wherein "access authorization datum" reads on "fingerprint authentication code");

controlling how the user can interact with said computer system based on said assigned authorization datum (See page 2, paragraph 0017, wherein “controlling how the user can interact” reads on “extent of a user’s authorization is determined by the user’s profile”).

Walker et al. does not teach securely communicating between a fingerprint matching module interfaced to an authorization module that is interfaced to a resource access module for performing said step of using said fingerprint.

Schumann et al. teaches securely communicating between a fingerprint matching module interfaced to an authorization module that is interfaced to a resource access module for performing said step of using said fingerprint (See Schumann et al. page 5, paragraphs 0050-0054).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Walker et al. to include securely communicating between a fingerprint matching module interfaced to an authorization module that is interfaced to a resource access module for performing said step of using said fingerprint.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Walker et al. by the teaching of Schumann et al. to include securely communicating between a fingerprint matching module interfaced to an authorization module that is interfaced to a resource access module for performing said step of using said fingerprint because having separate interfaces insure more efficient security and authentication mechanism.

As to claim 15, Walker et al. as modified discloses wherein said scanning step is performed using a reading device that is integral with a pointing device of said computer system

Art Unit: 2175

(See page 2, paragraph 0017, also see pages 3-4, paragraphs 0020-0023, wherein “reading device that is integral with a pointing device” reads on “touch screen/pad”).

As to claim 17, Walker et al. as modified discloses wherein said scanning step is performed in response to a predetermined action taken by the user in interacting with said computer system (See page 3, paragraph 0019).

As to claim 18, Walker et al. as modified discloses wherein said predetermined action is a pointing device action taken by the user through operation of a reading device that is integral with a pointing device of said computer (See page 2, paragraph 0017, also see pages 3-4, paragraphs 0020-0023, wherein “reading device that is integral with a pointing device” reads on “touch screen/pad”).

As to claim 19, Walker et al. as modified discloses wherein said controlling step includes controlling network access in a computer system (See pages 2-3, paragraphs 0018-0019).

As to claim 21, Walker et al. as modified discloses wherein said controlling step includes controlling record access in a computer system (See page 3, paragraph 0021).

As to claim 22, Walker et al. as modified discloses wherein said controlling step includes controlling resource access in a computer system (See page 2, paragraphs 0017-0018).

Art Unit: 2175

As to claim 23, Walker et al. as modified discloses wherein said controlling step includes controlling feature access in a computer system (See page 4, paragraphs 0023-0032).

As to claim 24, Walker et al. as modified discloses wherein each one of said first secure interface, said second secure interface and said third secure interface comprising:

a encryption sub-module encrypting outgoing information from a given secure interface;  
a decryption sub-module decrypting incoming information received by said given secure interface (See Schumann et al. page 4, paragraphs 0045-0049, also see Schumann et al. page 5, paragraphs 0056-0058).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12, 16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (U.S. Pub. No. 2003/0028811 A1) in view of Felsher (U.S. Pub. No. 2002/0010679 A1) and further in view of Schumann et al. (U.S. Pub. No. 2002/0021805 A1).

As to claim 1, Walker et al. discloses a secure computer resource access system (See page 3, paragraph 0019), comprising:

a fingerprint reading device (See page 4, claim 1 language);

Art Unit: 2175

a store of fingerprint data corresponding to a plurality of different users (See page 2, paragraph 0017);

an authorization system coupled to said reading device and configured to access said store and to associate an authorization level with a user based on the user's fingerprint (See page 2, paragraph 0017);

said access mechanism being responsive to said authorization system to control how a user can interact with said computer resource based on said associated authorization level (See page 2, paragraphs 0012-0013, also see page 3, paragraph 0019).

Walker et al. does not teach an access mechanism that defines a plurality of different authorization levels associated with a plurality of file resources.

Felsher teaches an access mechanism that defines a plurality of different authorization levels associated with a plurality of file resources (See Felsher page 36, paragraphs 0251-0254).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Walker et al. to include an access mechanism that defines a plurality of different authorization levels associated with a plurality of file resources.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Walker et al. by the teaching of Felsher to include an access mechanism that defines a plurality of different authorization levels associated with a plurality of file resources because it provides for secure and cost effective method of database access and retrieval.

Walker et al. as modified still does not teach said access mechanism including at least one fingerprint matching module having a first secure interface to said fingerprint device and at least one authorization module having a second secure interface to said fingerprint matching module and a third secure interface to at least one resource access module.

Schumann et al. teaches said access mechanism including at least one fingerprint matching module having a first secure interface to said fingerprint device and at least one authorization module having a second secure interface to said fingerprint matching module and a third secure interface to at least one resource access module (See Schumann et al. page 4, paragraphs 0045-0049, also see Schumann et al. page 5, paragraphs 0056-0058).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have further modified Walker et al. as modified to include said access mechanism including at least one fingerprint matching module having a first secure interface to said fingerprint device and at least one authorization module having a second secure interface to said fingerprint matching module and a third secure interface to at least one resource access module.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Walker et al. by the teaching of Schumann et al. to include said access mechanism including at least one fingerprint matching module having a first secure interface to said fingerprint device and at least one authorization module having a second secure interface to said fingerprint matching module and a third secure interface to at least one resource access module because having separate interfaces insure more efficient security and authentication mechanism.



As to claim 2, Walker et al. as modified discloses wherein said fingerprint reading device is integral with a pointing device of a computer system (See Felsher page 38, paragraph 0285).

As to claim 3, Walker et al. as modified discloses wherein said fingerprint reading device is integral with a keyboard device of a computer system (See page 2, paragraph 0017, wherein “fingerprint reading device is integral with a keyboard device” reads on “fingerprint sensor/keyboard”).

As to claim 4, Walker et al. as modified discloses wherein said store of fingerprint data employs a data structure for storing said fingerprint data in an encrypted format (See Felsher page 35, paragraph 0248, also see Felsher abstract).

As to claim 5, Walker et al. as modified discloses wherein said encrypted format is protected by a software key (See Felsher pages 3-4, paragraphs 0043-0044, also see Walker et al. page 1, paragraph 0008).

As to claim 6, Walker et al. as modified discloses wherein said authorization system communicates with said store of fingerprint data across an encrypted channel (See Felsher page 13, paragraph 0113, also see Felsher pages 35-36, paragraph 0250, also see Felsher page 3, paragraph 0043).

Art Unit: 2175

As to claim 7, Walker et al. as modified discloses wherein said authorization system communicates with said store of fingerprint data across a computer network (See pages 2-3, paragraphs 0018-0019).

As to claim 8, Walker et al. as modified discloses wherein said access mechanism controls file access within a computer system (See Felsher page 18, paragraph 0131).

As to claim 9, Walker et al. as modified discloses wherein said access mechanism controls network access within a computer system (See pages 2-3, paragraphs 0018-0019).

As to claim 10, Walker et al. as modified discloses wherein said access mechanism controls record access within a computer system (See page 3, paragraph 0021).

As to claim 11, Walker et al. as modified discloses wherein said access mechanism controls resource access within a computer system (See Felsher page 19, paragraph 0133).

As to claim 12, Walker et al. as modified discloses wherein said access mechanism controls feature access within a computer system (See Felsher page 10, paragraph 0091, also see Felsher page 19, paragraph 0137).

As to claim 16, Walker et al. as modified does not teach wherein said scanning step is performed periodically as the user interacts with said computer system.

Art Unit: 2175

Felsher teaches wherein said scanning step is performed periodically as the user interacts with said computer system (See page 33, paragraph 0227, also pages 37-38, paragraph 0272-0274).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have further modified Walker et al. as modified to include wherein said scanning step is performed periodically as the user interacts with said computer system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Walker et al. as modified by the teaching of Felsher to include wherein said scanning step is performed periodically as the user interacts with said computer system because it provides for secure and efficient method of database access and retrieval.

As to claim 20, Walker et al. as modified does not teach wherein said controlling step includes controlling file access in a computer system.

Felsher teaches wherein said controlling step includes controlling file access in a computer system (See page 18, paragraph 0131).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have further modified Walker et al. as modified to include wherein said controlling step includes controlling file access in a computer system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Walker et al. as modified by the teaching of Felsher to

Art Unit: 2175

include wherein said controlling step includes controlling file access in a computer system because controlling file access allows for added security and efficiency in accessing computer data.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-13, and 15-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2175

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Flyntz (U.S. Patent No. 6,351,817 B1) teaches multi-level secure computer with token-based access control.

Brands (U.S. Patent No. 5,521,980) teaches privacy-protected transfer of electronic information.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114.

The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil  
February 18, 2004

  
**CHARLES RONES**  
**PRIMARY EXAMINER**